Amendments to the Claims

1. (Currently Amended) A method of operating a communication network to transfer data between nodes of the communication network, the communication network comprising a first node that includes first self-replicating code comprising software used in the data transfer, and also comprises at least a second node and a third node that do not initially include the software used in the data transfer, the method comprising the steps of:

executing the first self-replicating code in the first node to establish a communication channel with the second node, to replicate the first self-replicating code to generate second self-replicating code comprising the software used in the data transfer, and to provide the second self-replicating code to the second node over the communication channel;

executing the second self-replicating code in the second node to establish the communication channel with the third node, to replicate the second self-replicating code to generate third self-replicating code comprising the software used in the data transfer, and to provide the third self-replicating code to the third node over the communication channel;

receiving streaming data for the data transfer in the second node from the first node over the communication channel and executing the second self-replicating code in the second node to ~~handle the streaming data~~ replicate the streaming data received from the first node, and to route the replicated streaming data to a payload process in the second node; and

receiving the streaming data in the third node from the second node over the communication channel and executing the third self-replicating code in the third node to ~~handle the streaming data~~ replicate the streaming data received from the second node, and to route the replicated streaming data to a payload process in the third node.

2. (Currently Amended) The method of claim 1 further comprising the steps of:

executing the second self-replicating code in the second node to establish the communication channel with a fourth node, to replicate the second self-replicating code to generate fourth self-replicating code comprising the software used in the data transfer, and to provide the fourth self-replicating code to the fourth node over the communication channel; and

receiving the streaming data in the fourth node from the second node over the communication channel and executing the fourth self-replicating code in the fourth node to handle the streaming data replicate the streaming data received from the second node, and to route the replicated streaming data to a payload process in the fourth node.

3. (Cancelled)

4. (Currently Amended) The method of claim [[3]] 1 further comprising the step of:

executing the payload process in the second node to receive the replicated streaming data and process the replicated streaming data locally on the second node.

5. (Original) The method of claim 4 further comprising the step of:

executing the payload process in the second node to generate output data.

6. (Previously Presented) The method of claim 5 further comprising the step of:

executing the second self-replicating code in the second node to multiplex the output data and status information from the second node and forward the output data and the status information over the communication channel to the first node.

7. (Previously Presented) The method of claim 6 further comprising the step of:

receiving control information in the second node from the first node over the communication channel and using the control information in the second node to handle the streaming data.

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8. (Previously Presented) The method of claim 7 further comprising the step of:

routing the streaming data and the control information from the second node to the third node over the communication channel.

9. (Previously Presented) The method of claim 1 wherein the first self-replicating code comprises a streaming worm.

10. (Original) The method of claim 1 wherein the second node is remote from the first node and the third node is remote from the second node.

11. (Currently Amended) A communication network that provides for the transfer of data between nodes of the communication network, the communication network comprising:

a first node that includes first self-replicating code comprising software used in the data transfer;

a second node that does not initially include the software used in the data transfer; and

a third node that does not initially include the software used in the data transfer;

the first node, responsive to executing the first self-replicating code, establishes a communication channel with the second node, replicates the first self-replicating code to generate second self-replicating code comprising the software used in the data transfer, and provides the second self-replicating code to the second node over the communication channel;

the second node, responsive to executing the second self-replicating code, establishes the communication channel with the third node, replicates the second self-replicating code to generate third self-replicating code comprising the software used in the data transfer, and provides the third self-replicating code to the third node over the communication channel;

the second node receives streaming data from the first node over the communication channel and executes the second self-replicating code to ~~handle the streaming data~~ replicate the streaming data received from the first node, and to route the replicated streaming data to a payload process in the second node; and

the third node receives the streaming data from the second node over the communication channel and executes the third self-replicating code to ~~handle the streaming data~~ replicate the streaming data received from the second node, and to route the replicated streaming data to a payload process in the third node.

12. (Currently Amended) The communication network of claim 11 further comprising a fourth node, wherein:

the second node, responsive to executing the second self-replicating code, establishes the communication channel with the fourth node, replicates the second self-replicating code to generate fourth self-replicating code comprising the software used in the data transfer, and provides the fourth self-replicating code to the fourth node over the communication channel; and

the fourth node receives the streaming data from the second node over the communication channel and executes the fourth self-replicating code to ~~handle the streaming data~~ replicate the streaming data received from the second node, and to route the replicated streaming data to a payload process in the fourth node.

13. (Cancelled)

14. (Currently Amended) The communication network of claim [[13]] 11 wherein the second node, responsive to executing the payload process, receives the replicated streaming data and processes the replicated streaming data locally.

15. (Original) The communication network of claim 14 wherein the second node generates output data responsive to executing the payload process.

16. (Previously Presented) The communication network of claim 15 wherein the second node, responsive to executing the second self-replicating code, multiplexes the output data and status information from the second node, and forwards the output data and status information over the communication channel to the first node.

17. (Previously Presented) The communication network of claim 11 wherein the second node receives control information from the first node over the communication channel and uses the control information to handle the streaming data.

18. (Previously Presented) The communication network of claim 17 wherein the second node routes the data and the control information to the third node over the communication channel.

19. (Previously Presented) The communication network of claim 11 wherein the first self-replicating code comprises a streaming worm.

20. (Original) The communication network of claim 11 wherein the second node is remote from the first node and the third node is remote from the second node.